

# Introduction to Fixed Prosthodontics

# Dental Prosthodontics

- Prosthodontics is the dental specialty pertaining to the diagnosis, treatment planning, rehabilitation and maintenance of the oral function, comfort, appearance and health of patients with clinical conditions associated with missing or.





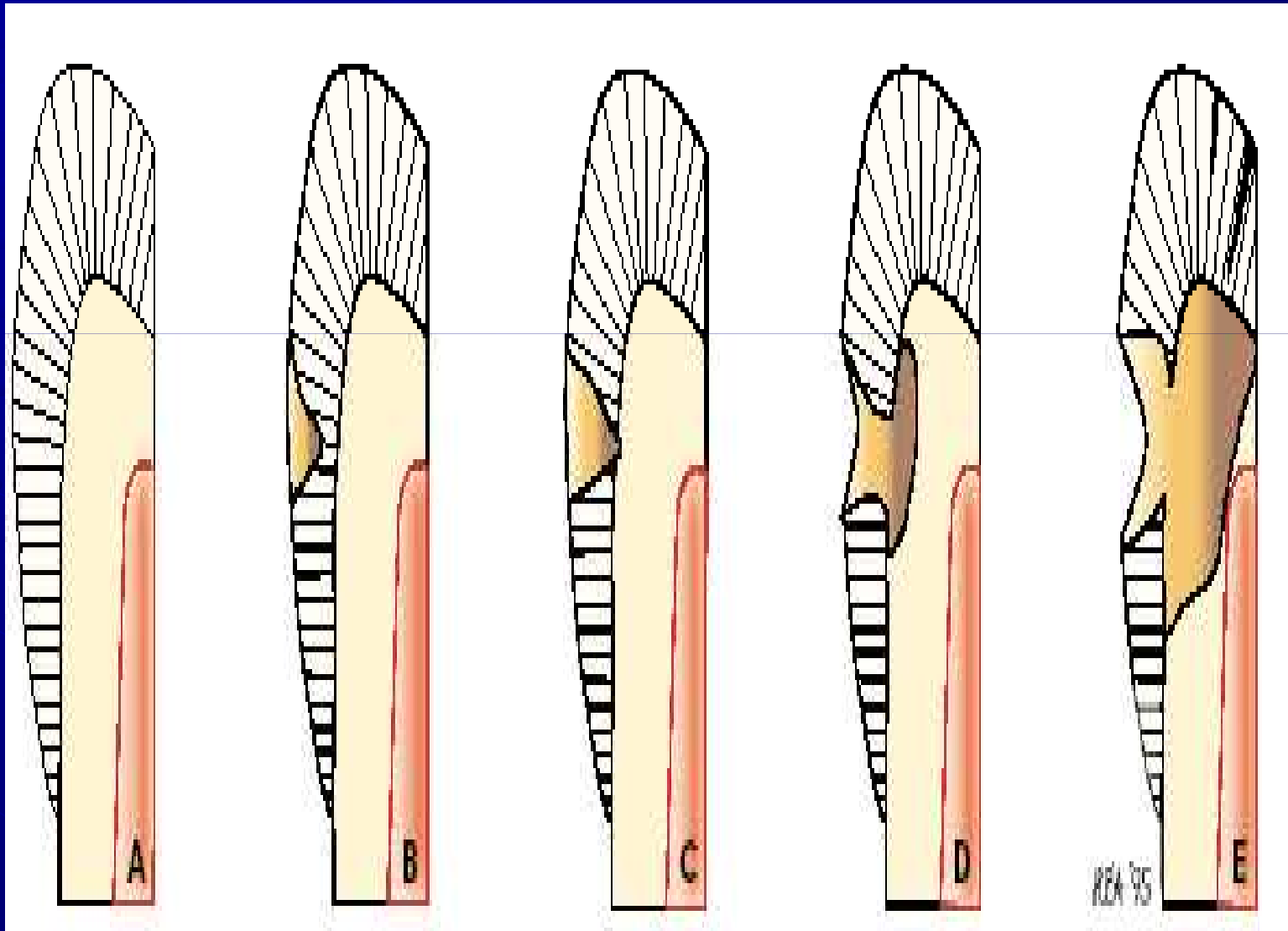






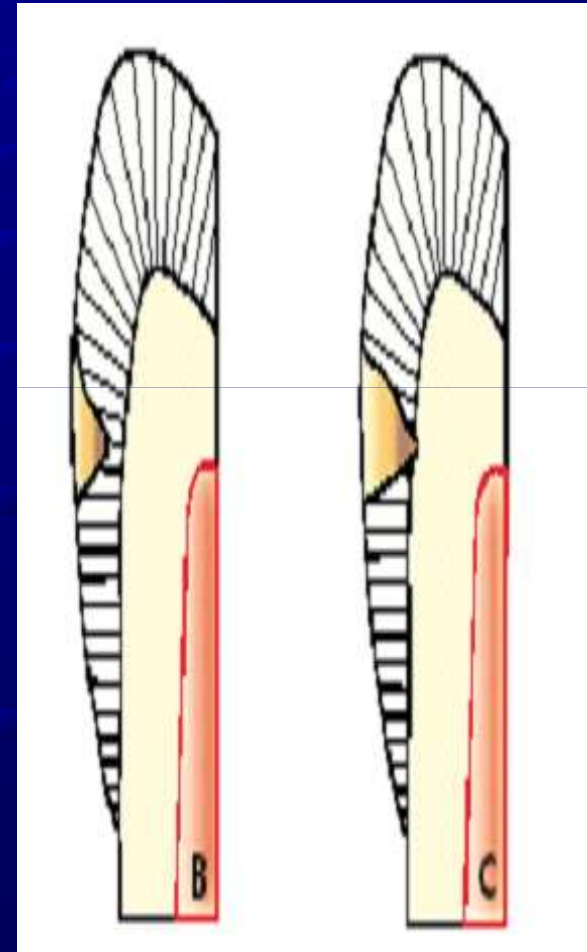
Deficient teeth

# Types of teeth deficiency



# Minor defects

This can be restored with plastic filling (amalgam or composite filling )





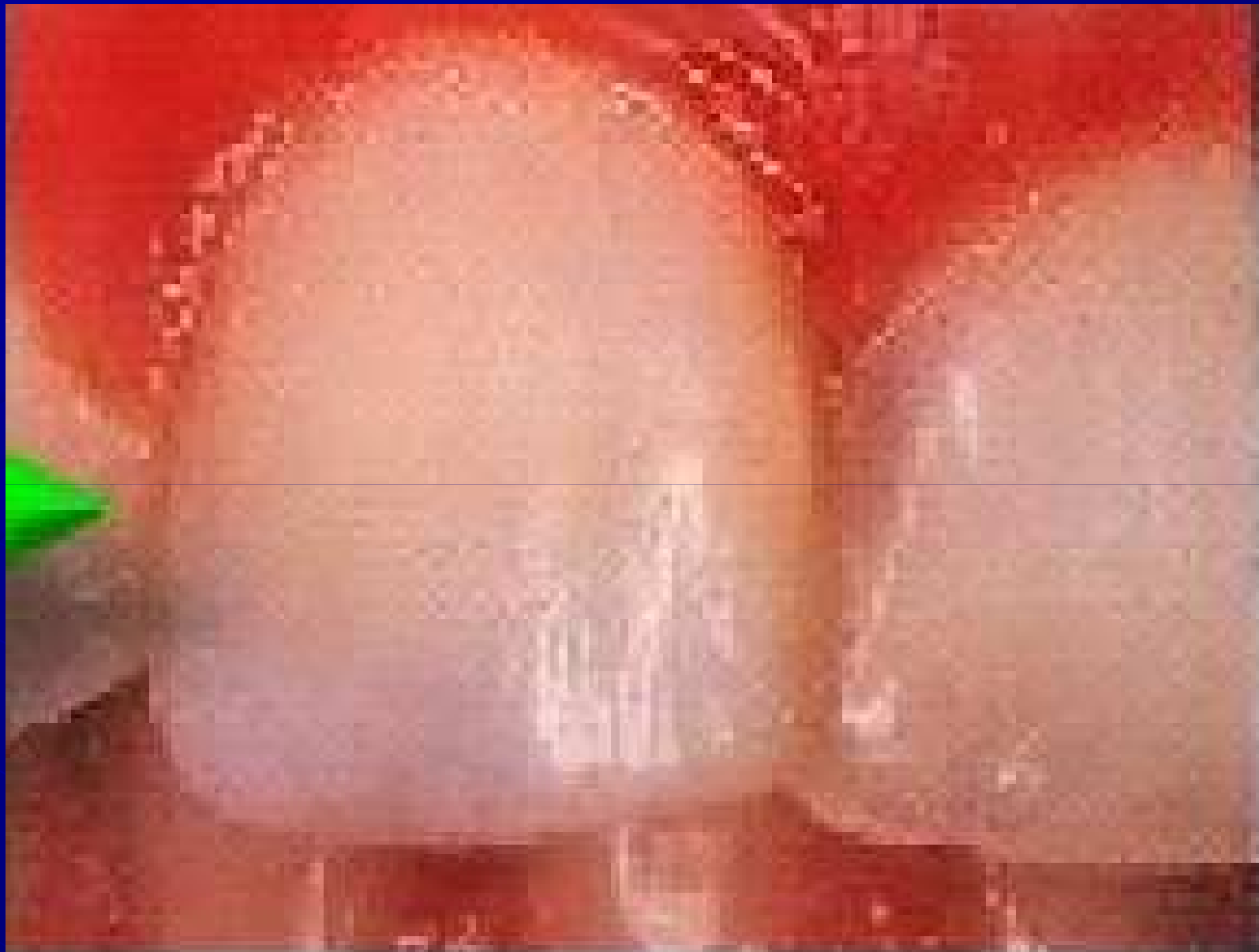












# Moderate defects

This can be restored  
with Inlay or Onlay



# Inlay restoration

- It is an intra-cronal casting restoration that restore the proximal and the occlusal surface of lost tooth structure **but does not cover the cusps**

















# Onlay

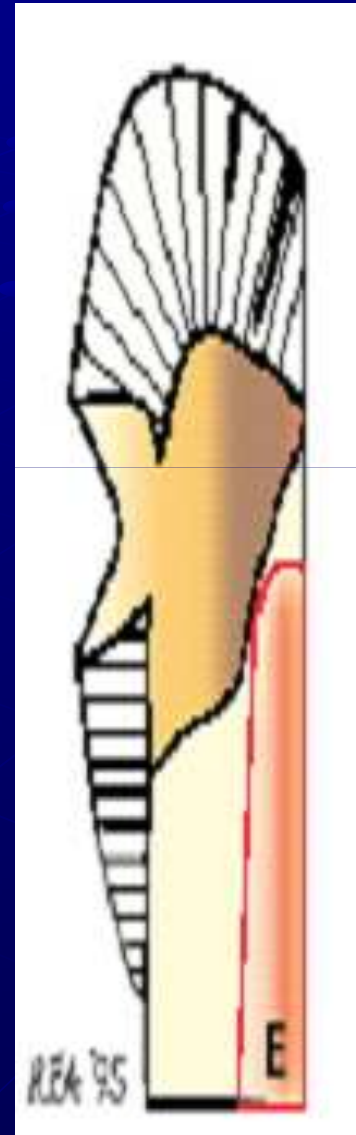
- It is an intra-cronal casting restoration that restore the proximal and the occlusal surface of lost tooth structure but **does cover the cusps**





# Large defects

Usually need a crown  
WHY???????







# Artificial crown

Is a fixed Restoration that restore the missing coronal portion of the natural tooth in order to restore esthetics , function and anatomy







# Classification of crowns

● According to the area of coverage :

**1- Full coverage** This can be retained by:

a- Encircling the preparation

b-Post in a root canal

**2- Partial coverage** This can be retained by:

a-Grooves

b-Pins

c-Combined mean

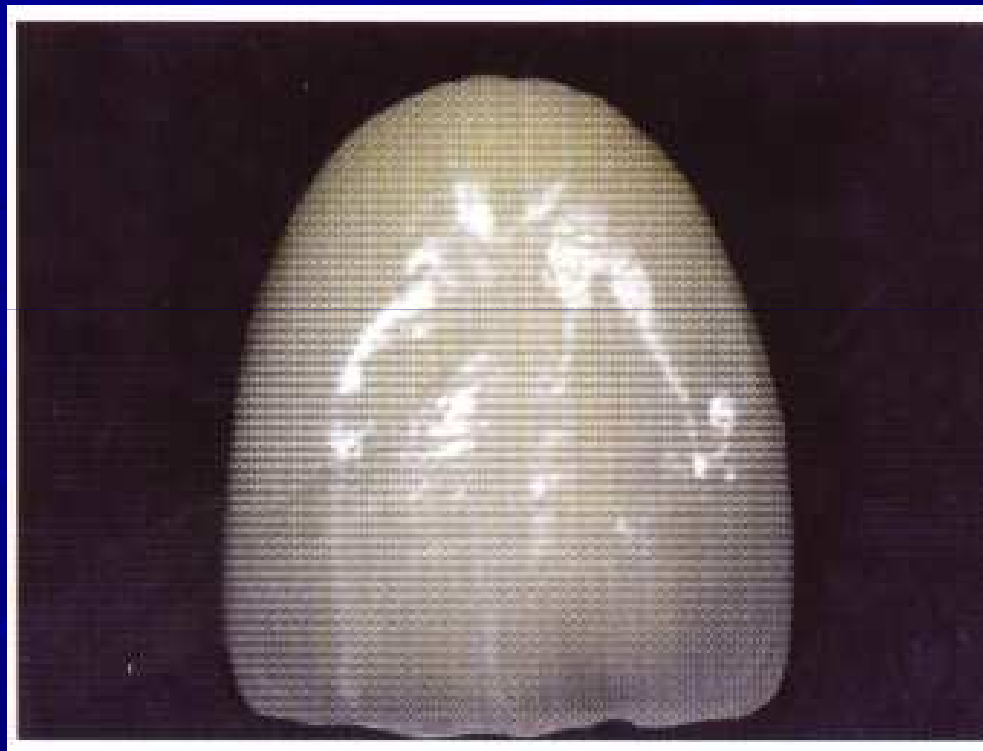
# 1- Full coverage

a- Encircling the  
preparation

# Full veneer



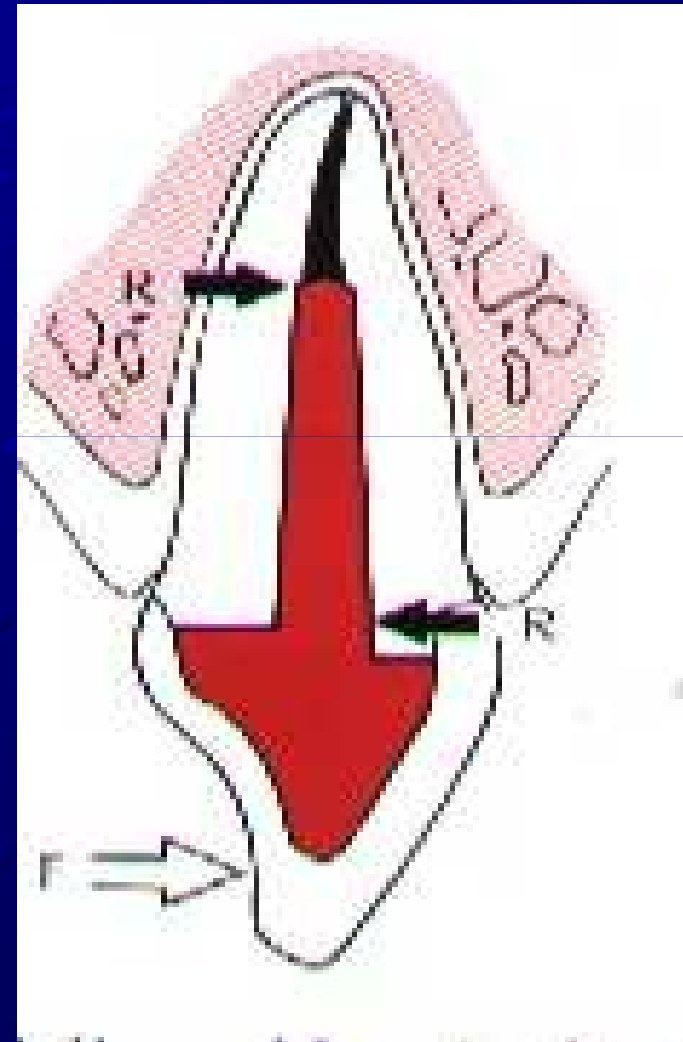
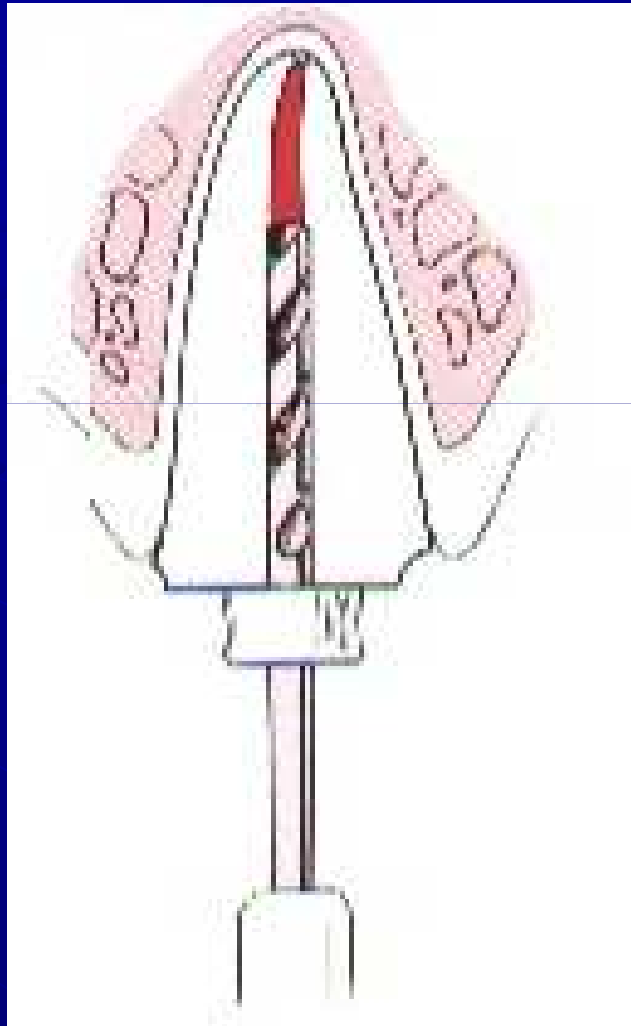
# All ceramic



# Metal ceramic



1- Full coverage be retained  
by:  
b-Post in a root canal











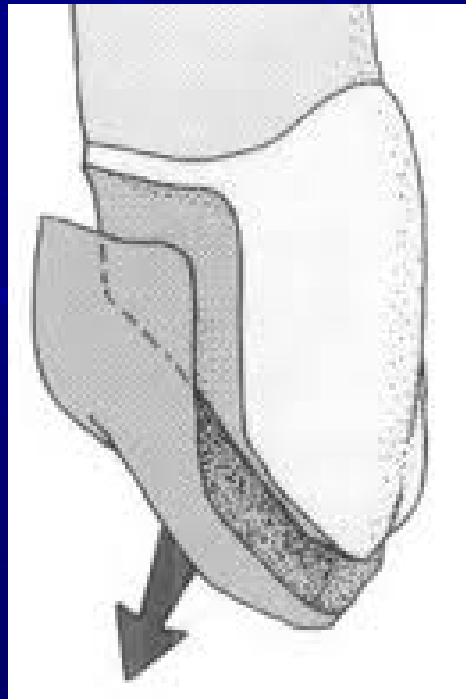




# 2-Partial coverage

# Partial veneer crown

- Covers only portions of the clinical crown, and retained by either groove or pins or combination



# Retained by grooves

## ● Three quarter crown

Cover lingual proximal till proximolabial line angle and occlusal till occlusolabial line angle take retention with two grooves ,one in each proximal surface

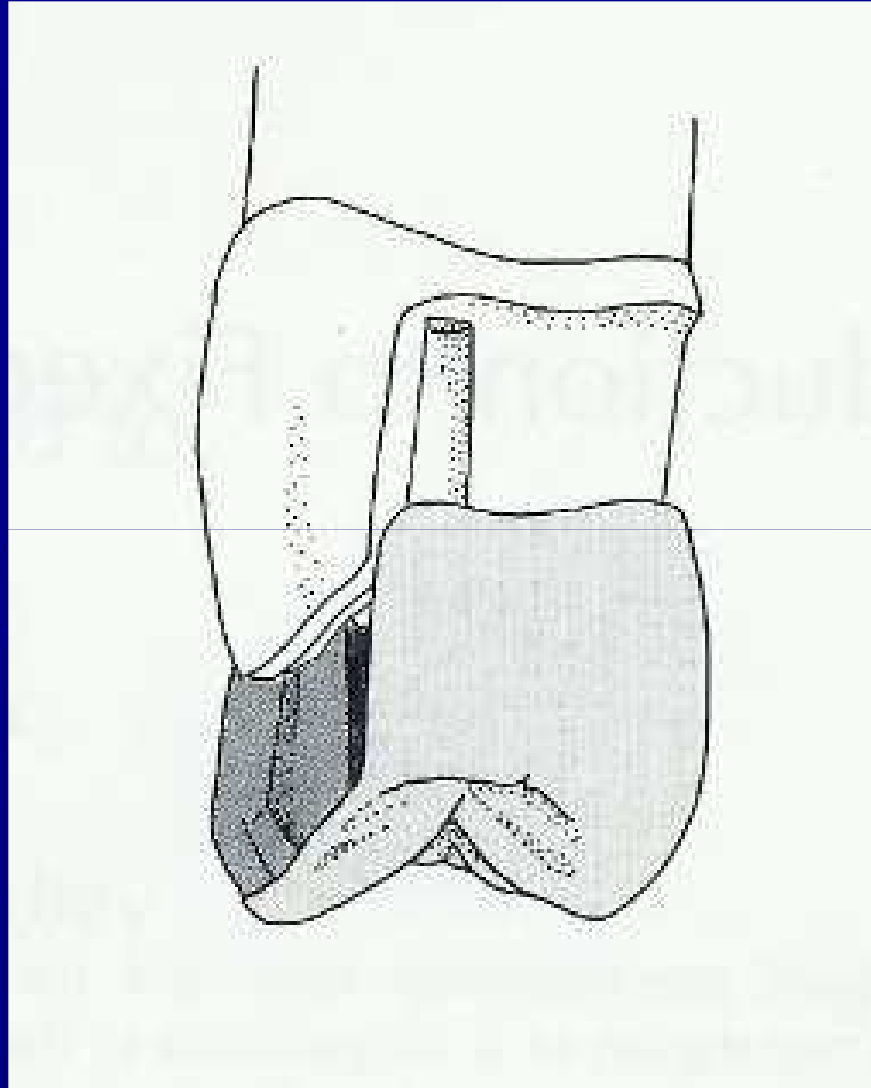














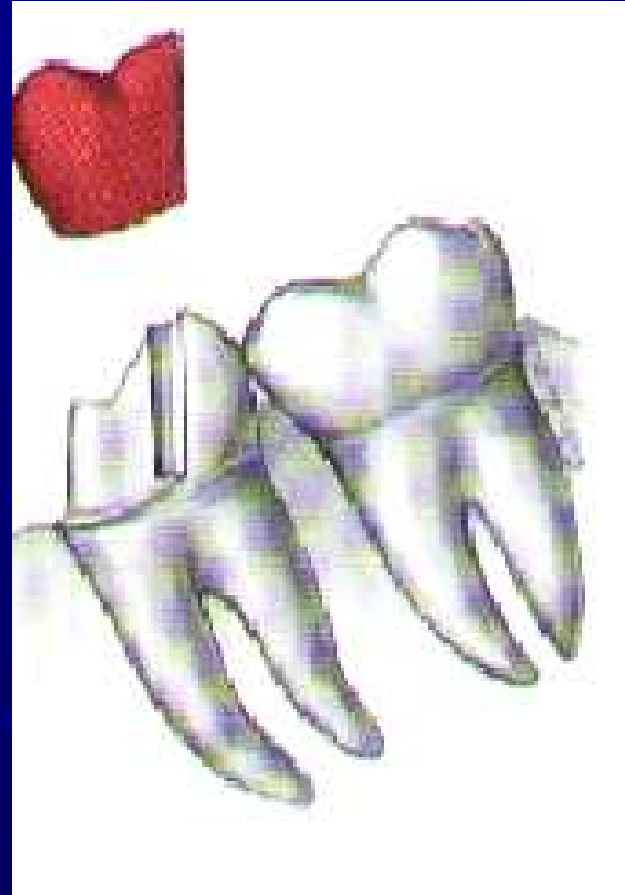


# Reverse three quarter

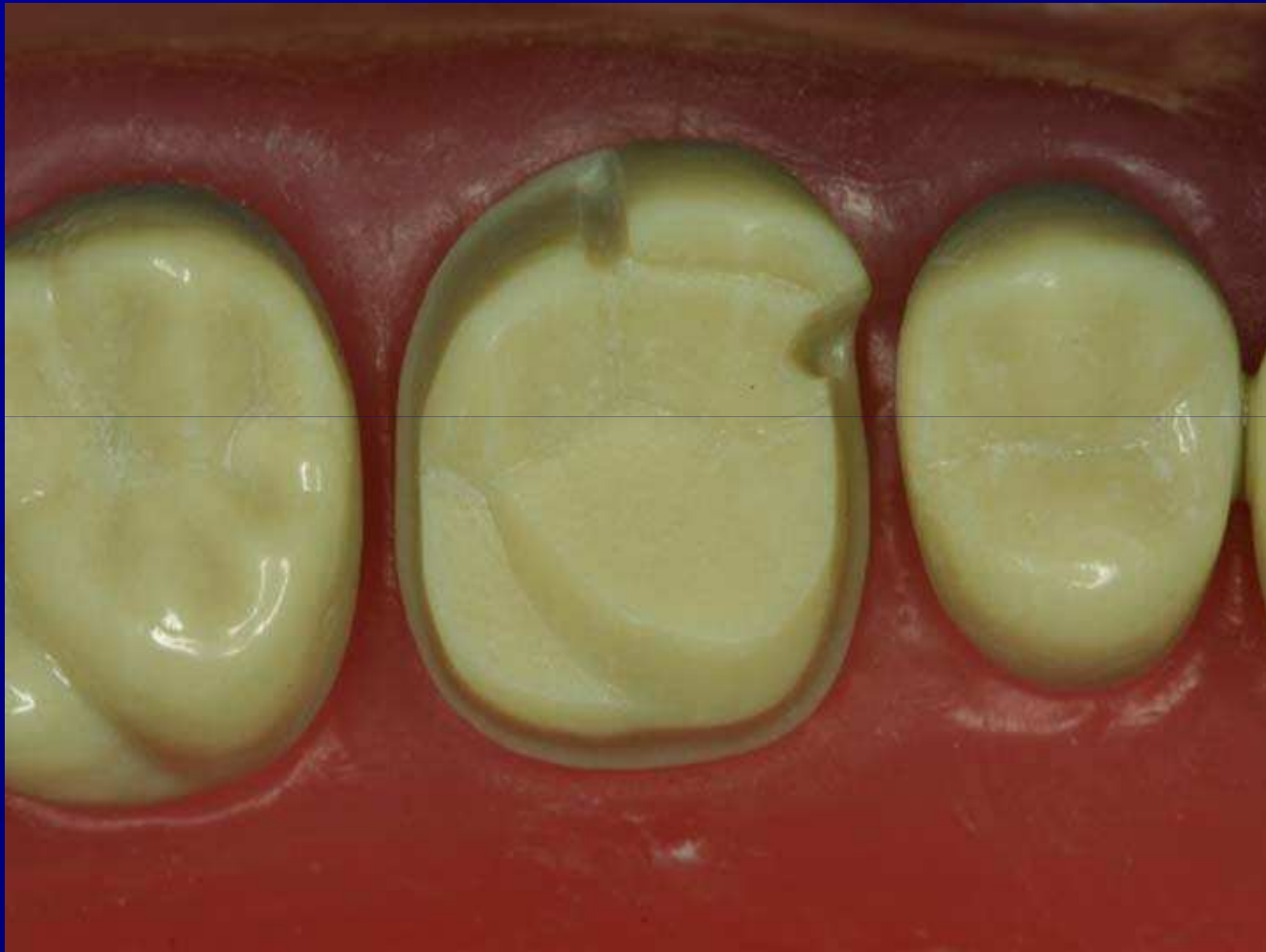
- Used in lower premolar it cover the lingual surface instead of the buccal

# Half crown

- Modified form of three quarter
- Cover occlusal and mesial surface half buccal and half lingual
- Grooves on buccal and lingual surface



7/8 crown

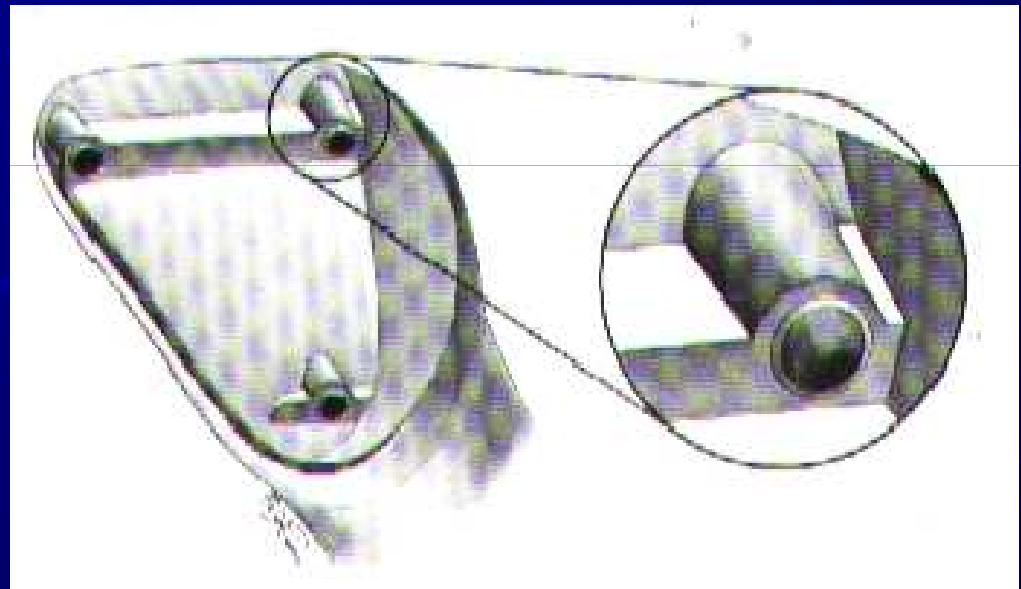




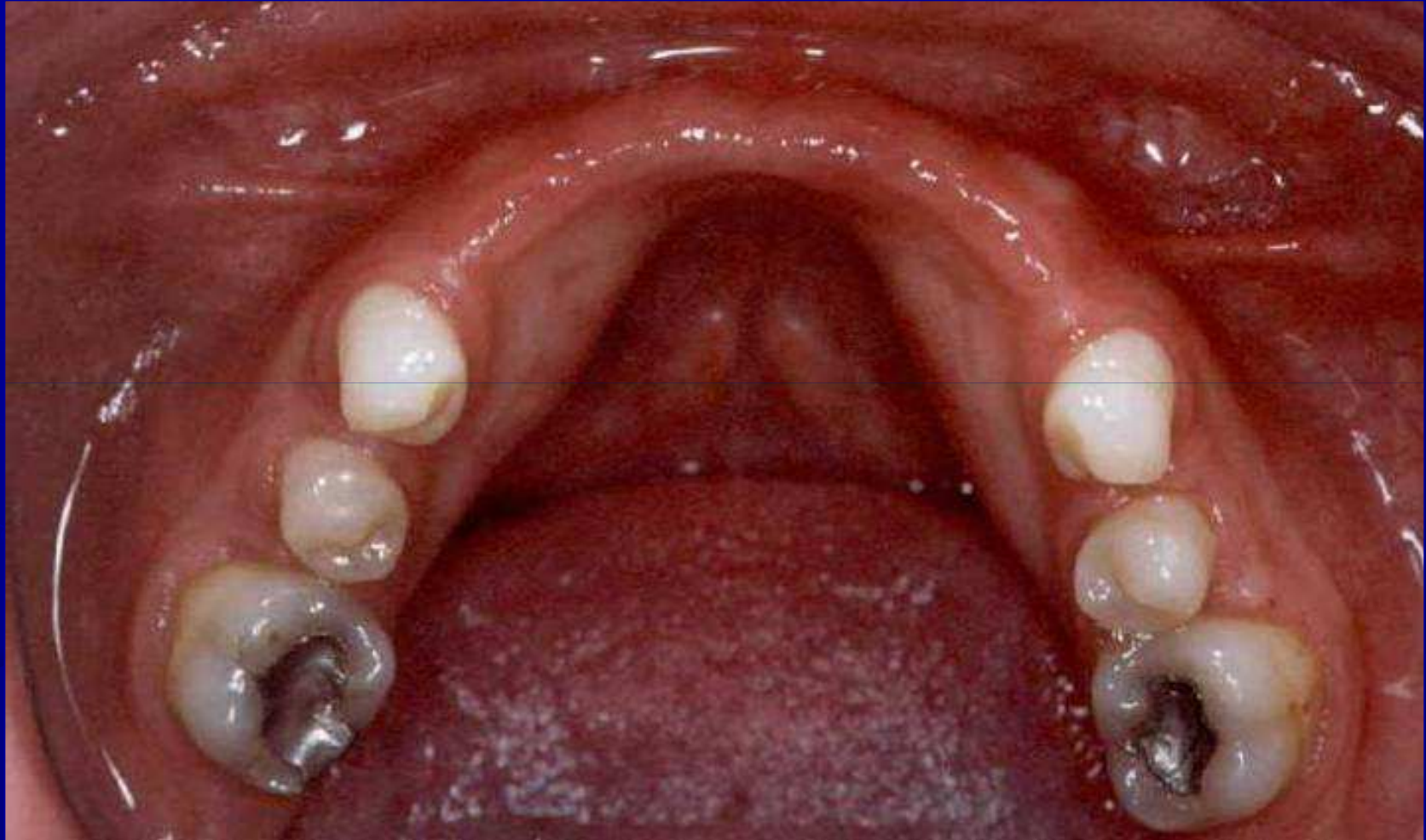


# Retained by pins

- Pin ledge retainer



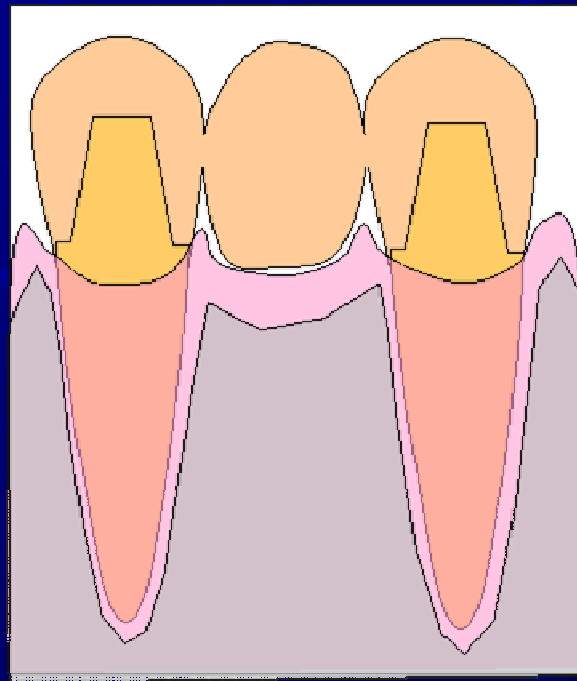
# Missing teeth

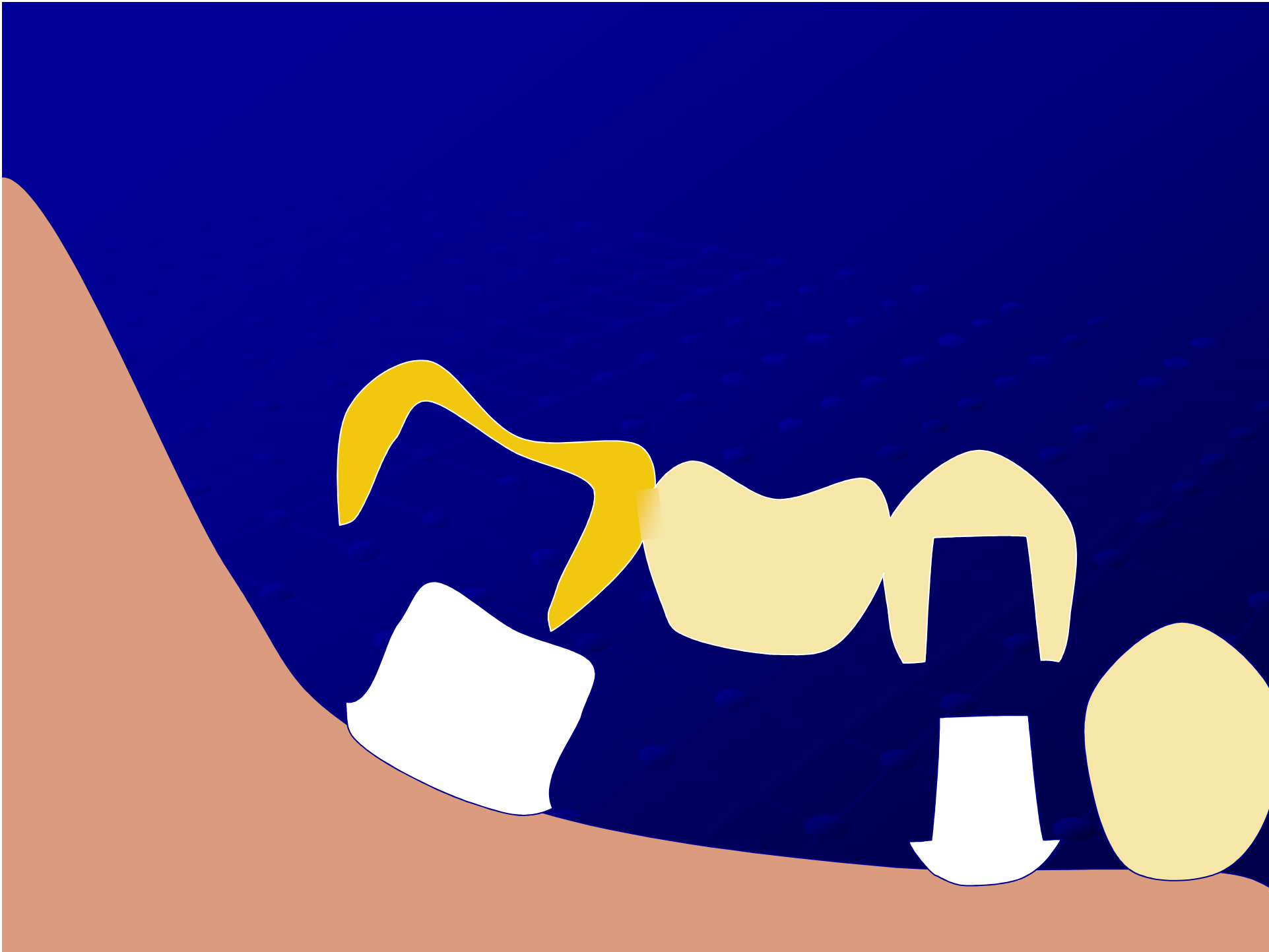




# Fixed Partial Denture

It is a fixed Restoration that restore the missing natural tooth in order to restore esthetics , function and anatomy







# Components of Fixed Partial Denture

# Abutments





# Retainers



# Pontic

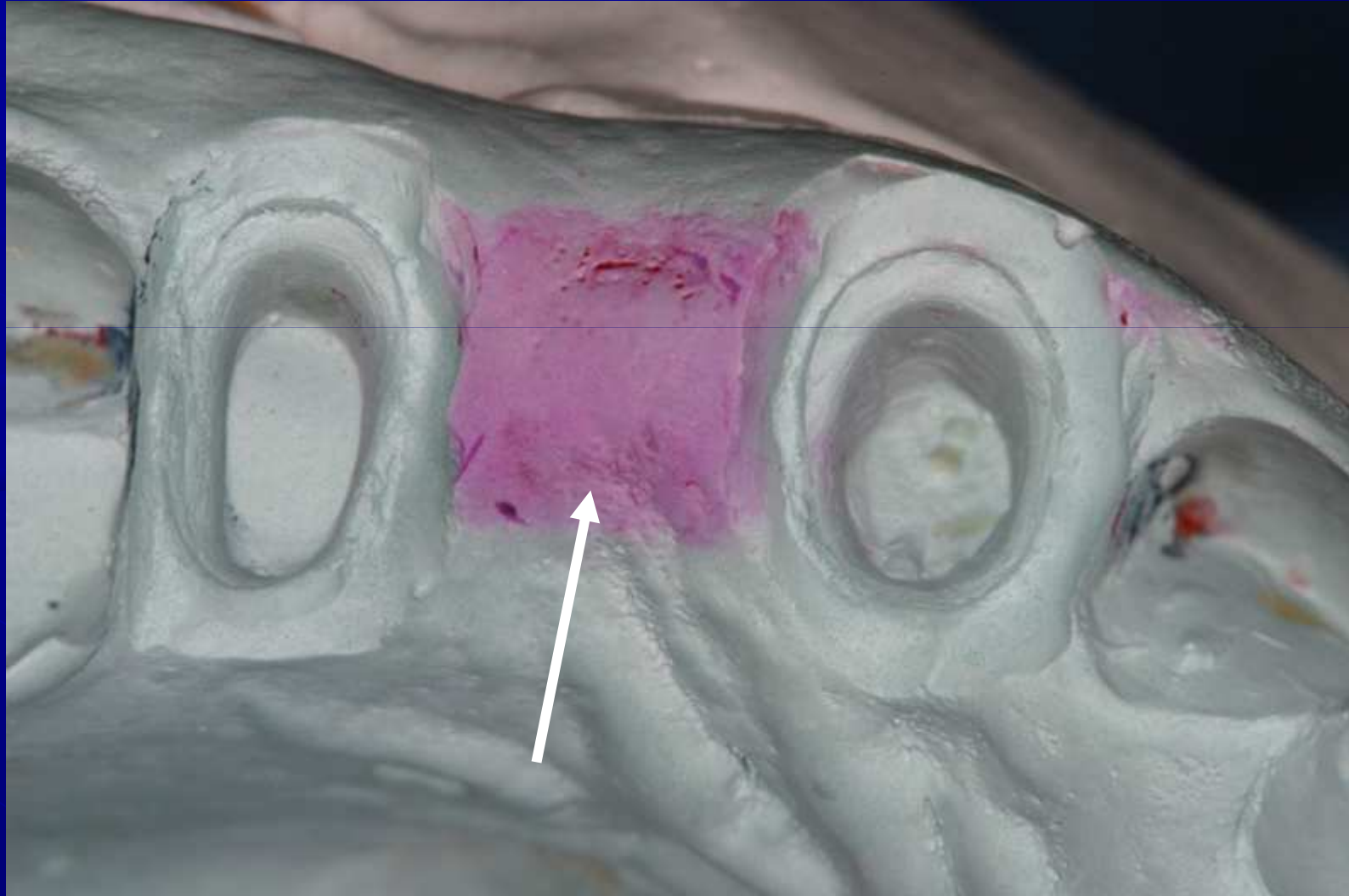


# Connectors





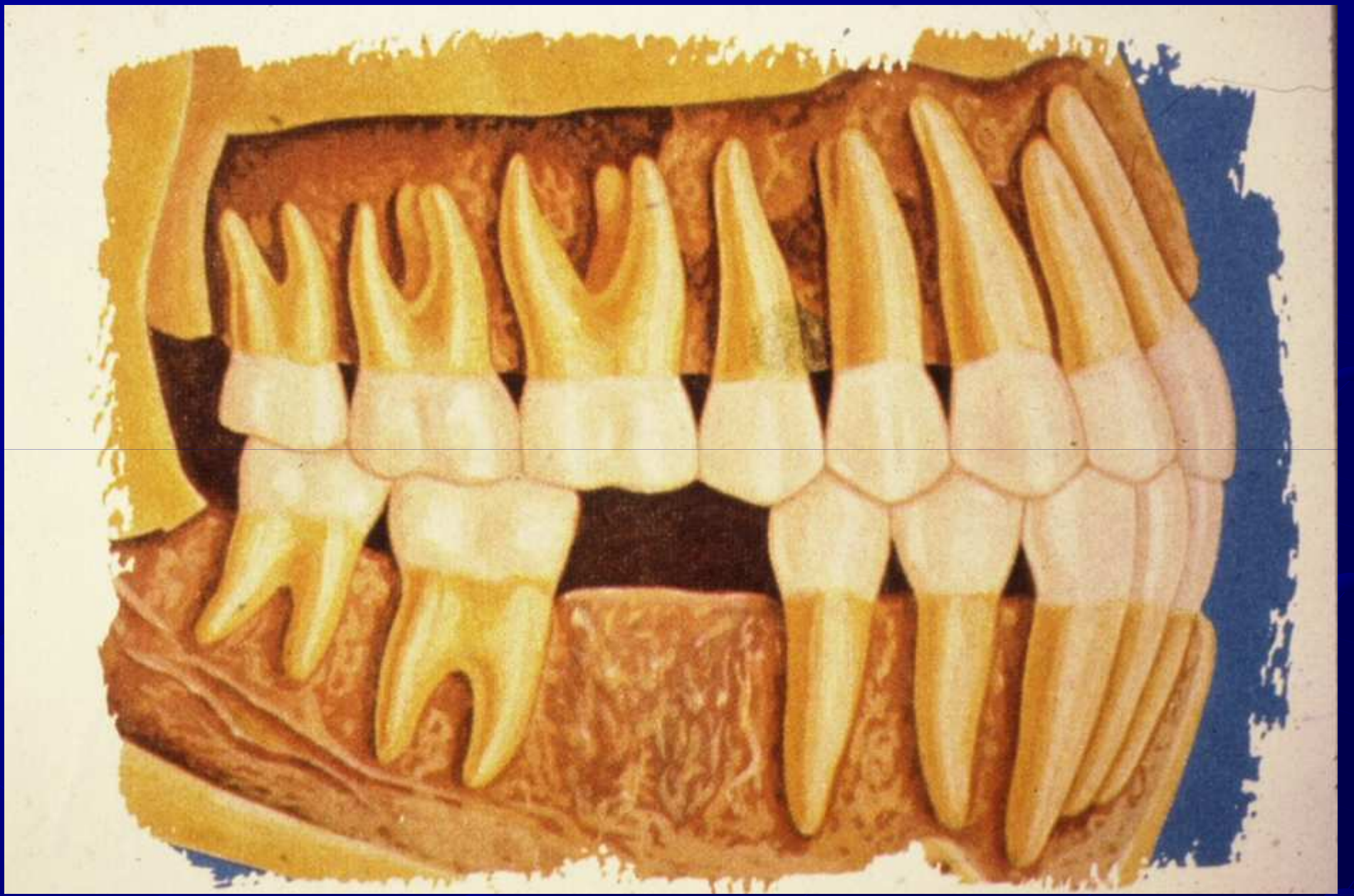
# Edentulous Ridge



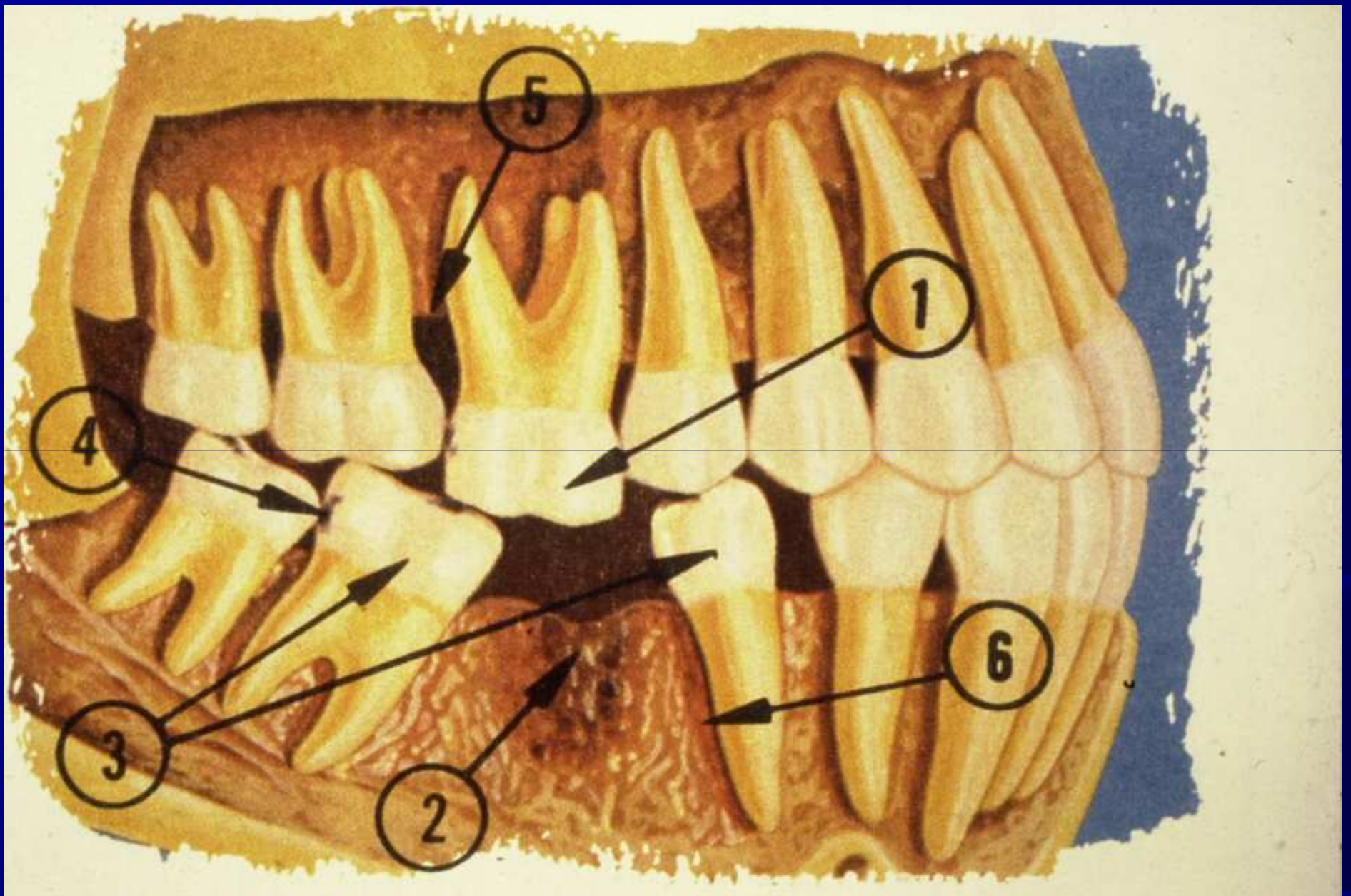
# Why Do A Fixed Partial Denture?

- Restore Function
- Appearance
- Prevention
- Self confidence

# Consequences of not replacing missing tooth











# Classification of Bridges

## ● According to Retention

### 1- simple bridge

- Fixed fixed
- Fixed support
- Fixed free
- Spring cantilever
- 2- compound bridge

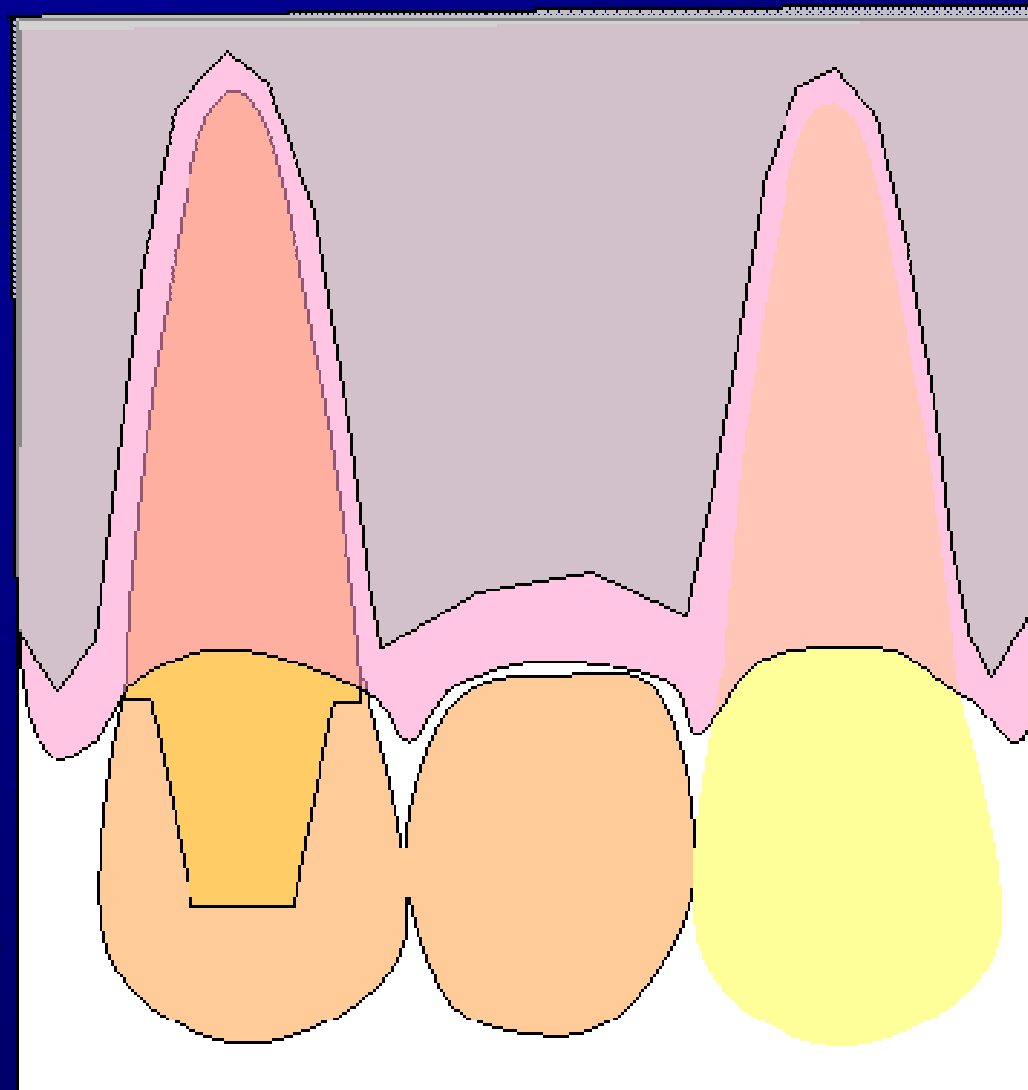
# Fixed Fixed bridge



# Fixed Support



# Cantilever







# Spring cantilever



# Compound bridge







## ● According to material

- Metallic
- Non metallic
- Combination

## ● According to site

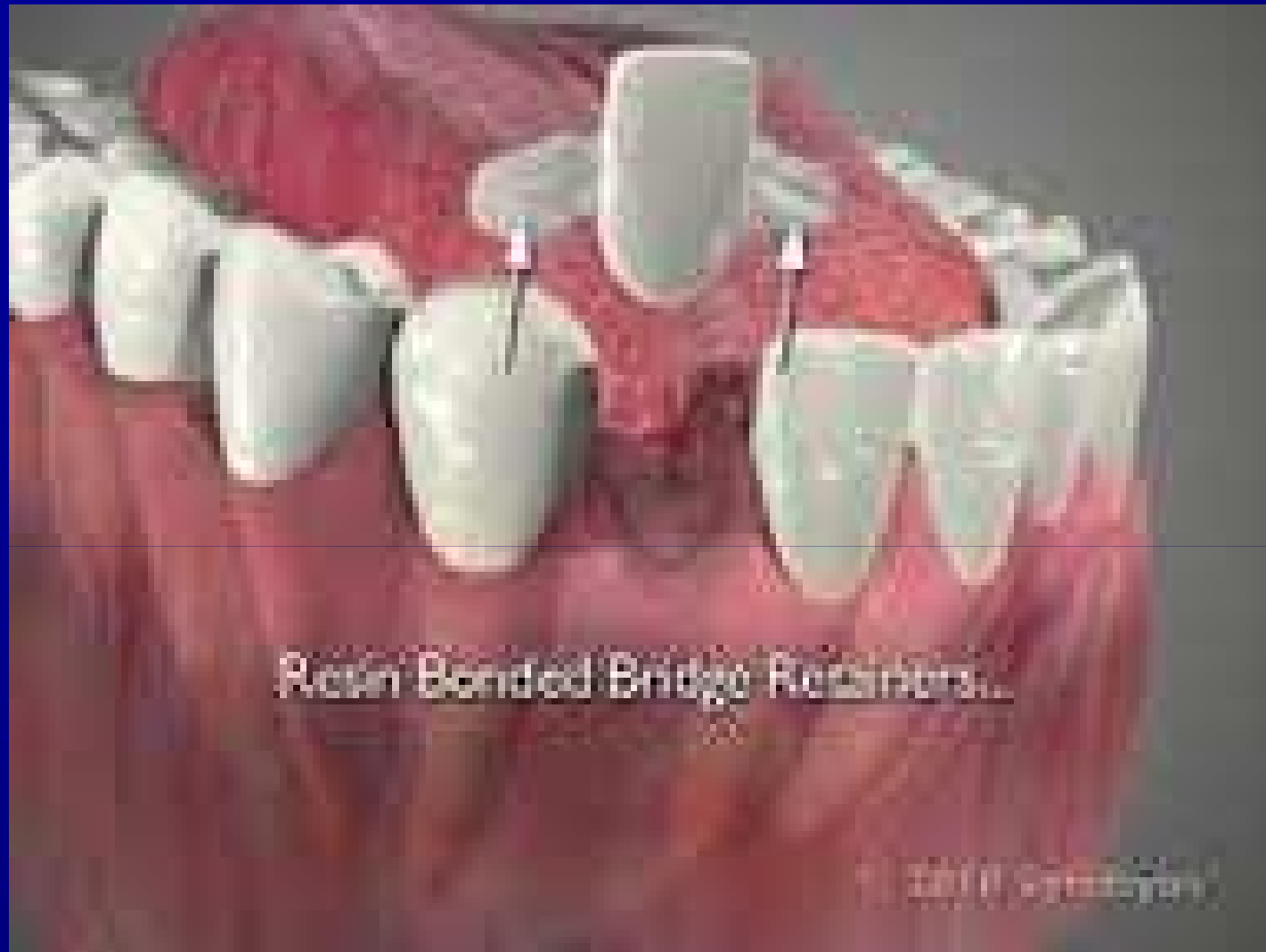
- Anterior (unilateral-bilateral)
- Posterior
- Complex

# Important terms

# Resin retained restoration

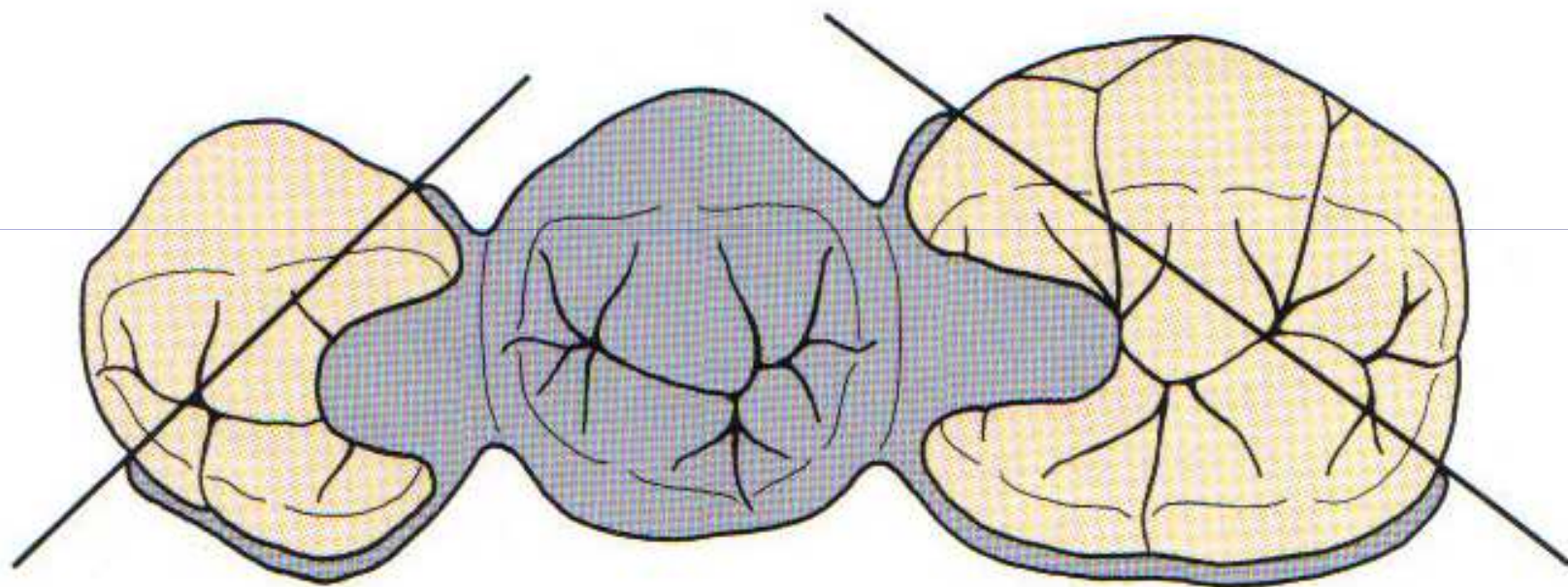
- Resin retained

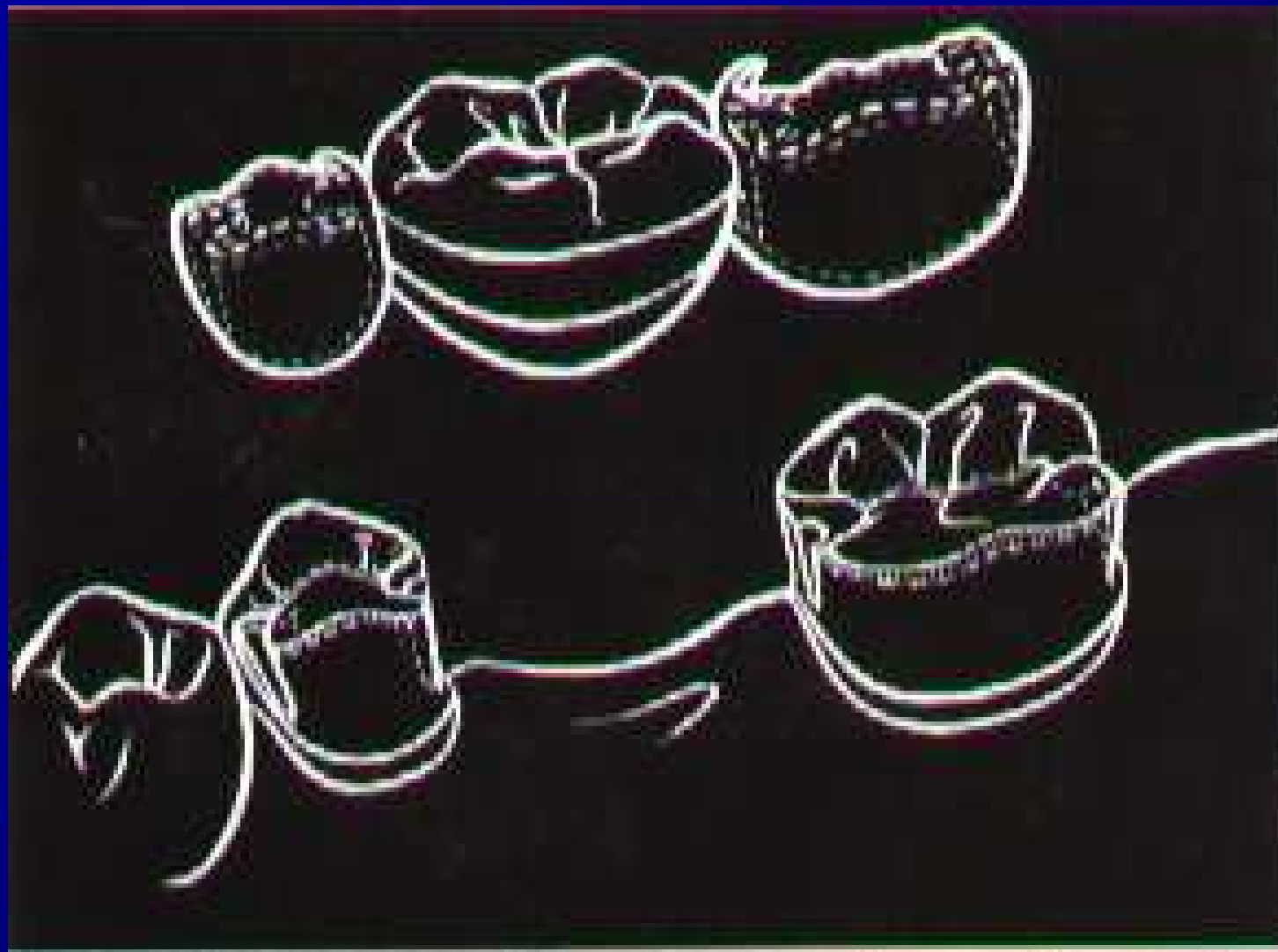










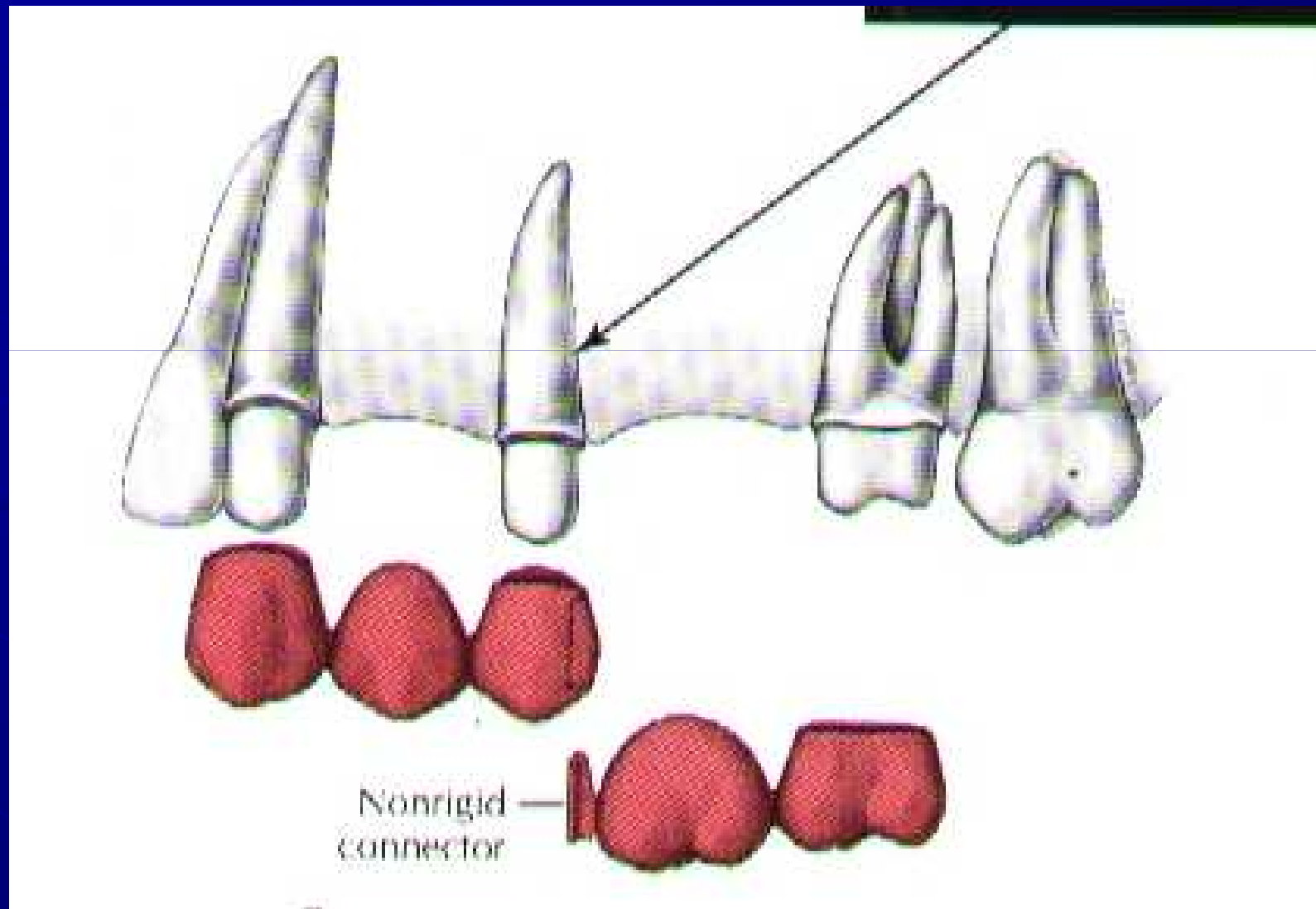




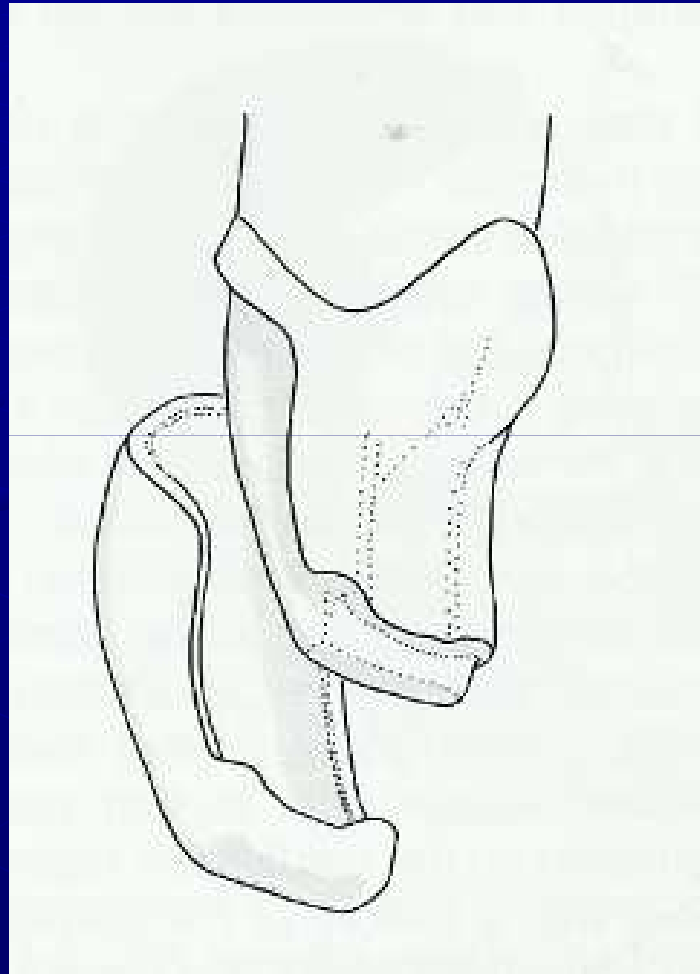
# Inlay fixed bridge



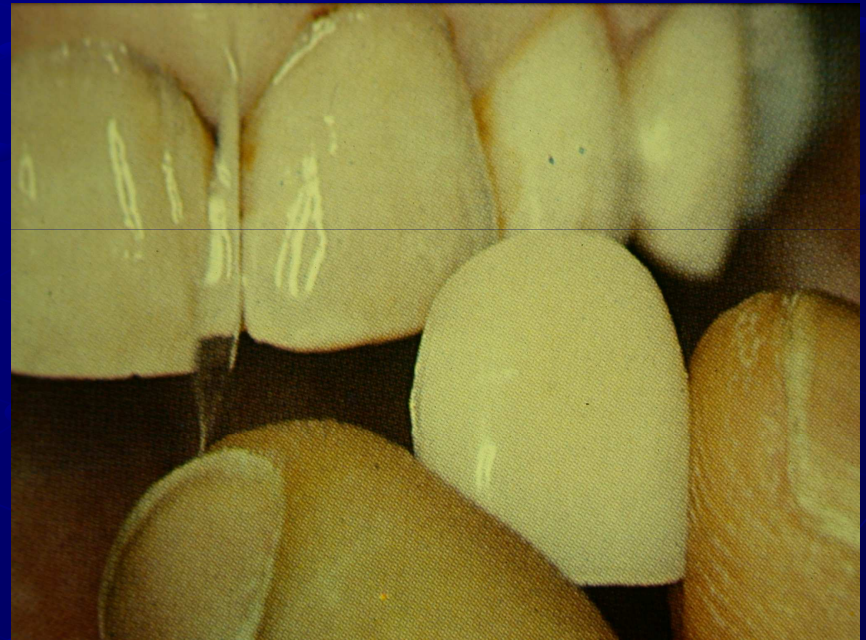
# Pier abutment



# Laminate veneers



# Laminate veneers



# Laminate veneers









# Temporary crown



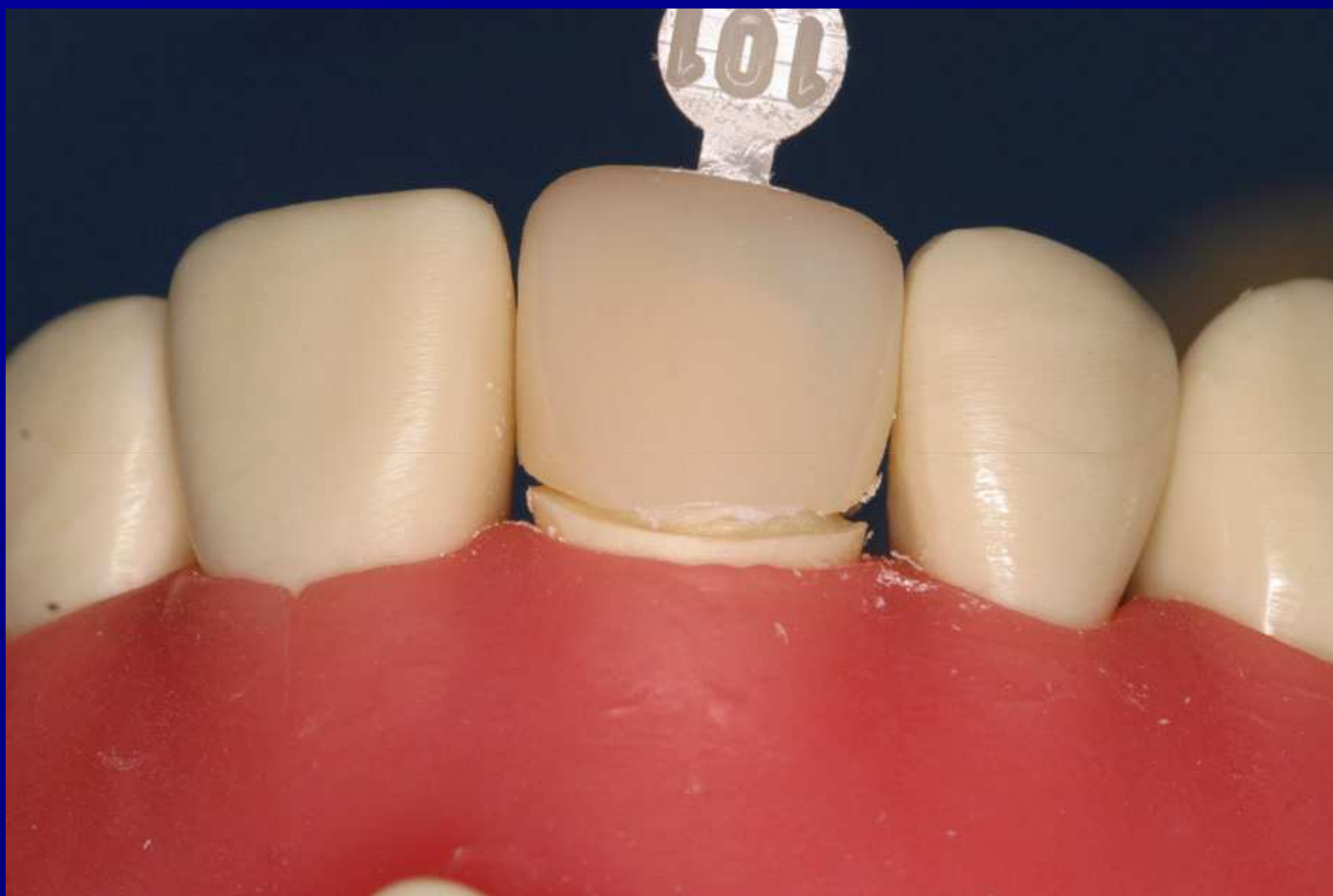




Select crown that fits interproximally



Adjust from gingival length





# Temporary bridge



# Immediate bridge



# The big picture

## ● Dental office

- Diagnosis and Treatment plane
- preparation
- impression
- inter occlusal record
- temporary protection
- Try in
- Cementation

## ● Dental lab

- Working cast and die fabrication
- Wax pattern- spruing -investing
- casting
- porcelain application



# Tooth preparation



# Impression



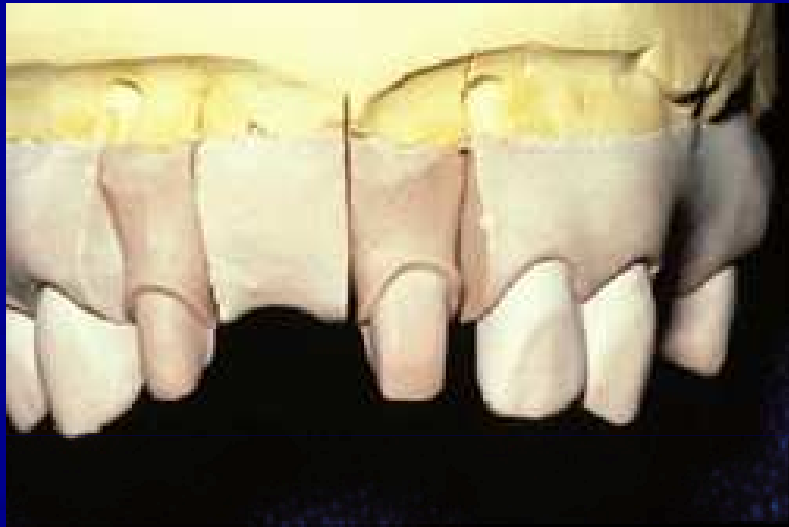
# Final impression







# Master cast and die fabrication





# Crown fabrication



# Polishing and cementation



Thank You for Your  
attention!